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No. 1.

ON THE PATHOLOGY OF OBESITY.

[THE following is an extract from one of the Gulstonian Lectures, delivered in May, 1850, at the College of Physicians and Surgeons, London, by Thomas King Chambers, M.D. The numbers in this extract refer to a table of cases of obese persons in a former lecture.]

The most interesting way of illustrating the pathology of obesity will be to detail the causes of death in a considerable number of cases of this affection. I have put together 69, of which the post-mortem records are thoroughly to be trusted, 67 having been examined at St. George's Hospital, and two by Dr. Shearman, of Rotherham, a gentleman of well-known accuracy and research.

CAUSES OF DEATH IN SIXTY-NINE CORPULENT PERSONS.

Medical Cases.

Dropsy	-	-	-	-	-	-	-	-	13
Apoplectic coma	-	-	-	-	-	-	-	-	11
Pneumonia	-	-	-	-	-	-	-	-	5
Pleurisy (acute 2, chronic 1)	-	-	-	-	-	-	-	-	3
Fainting (fatty atrophy of heart)	-	-	-	-	-	-	-	-	1
Aneurism, 1 ; malignant disease, 1 ; fever, 1 ; rupture of stomach, 1 ; polypus uteri, 1	-	-	-	-	-	-	-	-	5
Erysipelas of face	-	-	-	-	-	-	-	-	1

Surgical Cases.

Peritonitis after hernia	-	-	-	-	-	-	-	-	8
Erysipelas after ulcers and slight wounds	-	-	-	-	-	-	-	-	3
Gangrena senilis	-	-	-	-	-	-	-	-	2
Diffuse cellular inflammation	-	-	-	-	-	-	-	-	2
Secondary abscess	-	-	-	-	-	-	-	-	3
Nephritis after lithotripsy	-	-	-	-	-	-	-	-	1
Diseased prostate	-	-	-	-	-	-	-	-	1
Accidents	-	-	-	-	-	-	-	-	10

The heart was examined in 57 of these patients. In 7 it was found healthy—viz., in 4 who died from accidents, in 1 case of rupture of the stomach, 1 of hernia, and 1 of nephritis. In the latter case, the principal local collection of fat was about the kidneys, where the amount

usually found was greatly augmented. In 50 of the 57 cases where the heart was examined, it was found diseased. Of the 50 diseased hearts,

- 5 were hypertrophied and not dilated ;
- 8 hypertrophied and dilated ;
- 26 dilated only ;
- 11 atrophied.

In 16 of these, there was an increased amount of vesicular fat about the heart—viz. :

- In 13 of those which were dilated ;
- In 2 of those which were atrophied ;
- In 1 of those hypertrophied and dilated.

In 14 instances, the kidneys were also affected with chronic degeneration, which in all those, where an opportunity occurred of forming an opinion, seemed to be consecutive on the cardiac disease.

A cursory glance over the facts recorded in these lists will be sufficient to show what a great influence over life the disorders of the circulating system have had. In the medical cases, the two classes which make up the bulk of the whole may be referred entirely to this source ; and in the surgical cases, nearly all are of a nature to be much aggravated by an ill-balanced distribution of blood.

The change which most commonly affects the heart is dilatation, probably dependent on the greatly-increased quantity of capillaries distributed throughout the body, and the consequent increase in the amount and pressure of the circulating fluid upon the central organ. The hypertrophy which sometimes ensues is not unlikely to be an effort of nature to supply force in proportion to the increased demand.

In 11 cases out of the 69, atrophy of the heart was observed, that is, diminution in thickness of the walls without any external augmentation of size ; and in such of these cases as were submitted to the test of microscopic examination, a deposition of *molecular* fat, destruction of the nuclei, and other evidences of degenerated muscles, were found.

We must be careful to distinguish this fatty atrophy or degeneration from deposition of *vesicular* fat ; the first arises from deficient nutrition, the second is due to excess. One is a retrogression from a more highly endowed tissue to one less distinguished by its importance and offices ; the other is an increased growth. It is true they may be coincident, as in the instances before us of atrophied hearts in obese people ; yea, they may exist together in the same organ, as in two of these cases, where there was much fat at the base of the great vessels and degenerated muscle at the same time. But still they are contrasted conditions, hypertrophy and atrophy of different tissues.

It still remains to be explained why these two opposite states are so often associated together ; why degenerated muscle is more common in fat than in thin people, as would appear to be the case from a paper presented by Dr. Quain a short time back to the Medico-Chirurgical Society. It does not arise from the pressure upon the muscle caused by the altered shape and size of the heart ; for it is equally apt to occur in cases of obesity where there is only the ordinary amount of fat at

the base of the organ, as where the adipose tissue there is augmented. It more probably depends on some change in the condition of the circulating fluid associated with obesity, which renders the formation of fibrin more difficult, and allows the muscular fibre to undergo an interstitial decomposition into an oily matter.

The anomalous state of the circulation in corpulent persons, caused by the quantity of capillaries, either with or without the cardiac disease consequent thereon, is, I think, sufficient to explain all the complaints to which they are subject. The sluggishness of their blood's movement accounts for their proneness to cachectic boils, to diffuse cellular inflammation, to congestions of the lungs, liver and brain, and explains why the use of the lancet is so hazardous in such patients.

The *predisposing* causes (of which we must now speak) are of more importance in obesity than in any other morbid state. In those who are so constituted as to have a tendency to this form of hypertrophy, the most careful treatment will often not suffice to keep it off; while those who have an opposite diathesis remain thin, let them live as they will.

In persons prone to obesity, we may usually observe, that the bony framework of the body is less massive than in the spare, as is indicated by the smallness of their hands and feet. In the great majority of the cases before us, this peculiarity has been noticed in the column appropriated to it. The same is commonly seen also in cattle; in buying beasts likely to fatten well, the grazier will select those whose legs below the knees are short and taper, and refuse the long-backed, heavy-hoofed ox. This shows that bone has had little to do with the great weights of the obese persons recorded in the list. Their osseous skeleton, the part of their body which is of the greatest specific gravity, is smaller than that of other people, yet the whole body is much heavier. This confirms what was suggested in the former lecture, that extreme weight in the human species may be always considered as due to bulk of adipose matter, and not to excess of bone. A sufficient quantity of bone added to the body, to make a person come nearly up to any of the weight of these corpulent individuals, would render the skeleton too clumsy to answer any of the ordinary purposes of life. A man can move about and work with eight or nine extra stone of fat about him, as, for instance, R. B. (No. 30), who is a miller in constant employment day and night; but if that quantity of bone was laid on his skeleton, the muscles would be unable to wield the deformed limbs. The weight of a man's bones, in the dry state, with the ligaments attached, does not exceed a stone, at most, and it is easy to guess how its relation to the muscles would be altered, were it quadrupled in size only.

In persons of hereditary obesity the skin is usually fresh-colored and dry; the hair soft and fine.

In the urinary organs I am not aware that they differ in any respect from others.

The digestive apparatus performs its task usually with rapidity; and in cases where fatty hypertrophy is general throughout the body, I have not observed that tendency to constipation which is sometimes said to accompany obesity. The action of the bowels is generally natural, and in some cases they are loose.

The respiratory function in obese people presents us with a well-marked and very universal peculiarity. The volume of air which these people are capable of containing in or expiring from their chest is considerably less than the average quantity of those of their height. The lungs, instead of holding more air because the body is larger, appear, in these cases, of diminished capacity. Thus the vital capacity of H. T. (No. 35), a man of enormous muscular strength, and in his youth remarkable for his power of wind, ought to have been at least 250 cubic inches; instead of that, it is but 205. Ch. S. (No. 9) held 120 cubic inches of air, whereas she ought to have contained 206, according to the table of averages published by Dr. Hutchinson. G. O. B. (No. 18), when in perfect health, five years ago, held 255, instead of 270 cubic inches. He holds now very much less, probably from congestion of the pulmonary tissue, and increased corpulence.

To what are we to attribute this diminished capacity for containing air in the chest? Is it from the actual area of the thoracic cavity being less in corpulent persons? Dr. Hutchinson cannot find that it is so. Here is a cast of the interior of the chest of a stout man, standing 5 feet 7 inches, and weighing 11 stone 3 pounds; the other is the cast from the interior of the chest of a muscular light man, dead in the prime of youth and health (in fact, the notorious Hocker), who was 5 feet 10 inches high, and weighed 9 stone 7 pounds. The superficial inches of the walls of the chest inside, are, in the stout man, 318; in the spare one, one third less, 219 only. The spare man, though taller, had, then, a smaller chest than the corpulent. But was this actual capacity represented by the vital capacity? Was the stout man, who had the largest chest, as well as the most bulky body, able to breathe most air? No. The vital capacity of the large chest of the stout man was 202 cubic inches; the vital capacity of the small chest of the spare man, 233 cubic inches.

Dr. Hutchinson lays this diminished vital capacity to the motion of the ribs being impeded by the accumulation of fat outside them, but I am disposed not to attribute quite so much to this impediment as he does. With a view of testing how far it exists, I was anxious to obtain some accurate observations on the movements of the ribs, to which the ingenious instrument invented by Dr. Sibson affords facilities. With the kind assistance of that gentleman, I have got notes of the movements of the various parts concerned in respiration in the cases of H. T. (No. 35), Ch. S. (No. 9), and G. Wn. (No. 21). Our first observations tended to confirm most strongly the suggestion that the movements of the ribs and diaphragm *were* much impeded by the accumulation of fat. For example, in ordinary respiration, in H. T., the movement of the tenth rib, which should be 1-10 of an inch, was only 2-100; the movement of the sides of the abdomen, which should be 9-100, was only 3-100. In G. Wn. the movement of the tenth rib, which should be 1-10, was only 2-100, the movement of the sides of the abdomen 4-100. The movement of the centre of the abdomen, which should be 30-100, was in H. T. only 12 to 16-100, in G. W. 15 to 20-100.

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These were the results obtained by applying the instrument to the skin in the usual way. But when we take into consideration the yielding nature of the medium through which the motion of the ribs has to be transmitted, it is obvious that this method of observation, though correct with ordinary individuals, will not yield a satisfactory result in the case of the obese. There may be a considerable motion of the ribs, which is yet imperceptible on the external surface. And so indeed we found it; for when Dr. Sibson pressed his finger tightly on to the rib, so as to displace the fat, the movement of the instrument applied to the finger indicated that the play of the thoracic walls was nearly, if not quite, equal to that found in ordinary individuals.

For instance, in G. W., the right side of the abdomen, which had moved but 5-100 instead of 9-100 without pressure, moved, when the finger was applied, 10 to 12-100, or more than usual; the tenth rib moved 8-100 in fact, when before it had appeared to be moved only 2-100. The ribs appeared to move freely underneath the fat.

We have, I think, a right to conclude, from these observations, that the slight movement of the external surface of the chest in fat persons, as observed by the eye, or by the hand lightly laid upon it, is not so much an indication of diminished mobility of the bones within, as appears at first sight. I am disposed to think that the motion of the diaphragm in forced breathing is equal, if not greater, in them than in others; but that the upper ribs in ordinary and also in forced breathing move somewhat less than usual, but not to the extent indicated by the external surface.

The importance of these observations consists in their application to diagnosis. They lead us to be cautious in our examination of the chests of corpulent persons, and bid us not to jump to the conclusion that there is pulmonary disease, simply because there is diminished vital capacity or diminished movement apparent to the eyes.

I was anxious to put in consecutive order all the facts I have to lay before you about the lungs of corpulent persons, and therefore I have postponed to this point what might have been introduced when showing, by reference to the examples afforded in the casts before us, that the actual size of the lungs bears little proportion to the height or weight of the individual. What I wish to say now is, that comparative anatomy quite bears out this opinion. It is seldom that an opportunity occurs of weighing the lungs of a perfectly healthy man, but healthy beasts are always open to observation in our butchers' slaughter-houses; and as the animals are always killed in the same way in London, the internal organs, when sound, appear to the eye always in the same condition as regards the blood, &c., which might affect their weight. I have thought, therefore, it might be interesting to know what relation to the weight of the whole beast several of the viscera bear, and what, also, is their mutual relation in different breeds of cattle of different degrees of fatness. I have therefore obtained at several slaughter-houses the weights taken,

while the carcase was being cut up, of the lungs, liver and pancreas, and the weight of the quarters, of between seventy and eighty cattle. The result is, as I said before, that the lungs bear no relation to the weight of the beast, or to its fattening propensities. Thus, a thin, large-boned Dutch beast, whose four quarters weighed 95 st. 6 lbs., had lungs weighing but 9 lbs. 10 oz.; but a small Norfolk beast, weighing 57 st. 1 lb., also thin and unfatted, had 11 lbs. 6 oz. of lung; a Leicester, of 55 st. 7 lbs., had 7 lbs. 8 oz. of lung; small beasts, with 20 or 30 stone of fat upon them, had lungs similarly proportioned; 23 "improved Scotch" oxen, the quarters weighing from 100 to 104 stone each, had an average of 9½ lbs. of lung. The lungs of beasts that fatten well do not seem to be, as Prof. Liebig suggests, smaller than the lungs of those that fatten ill.

The same observations on cattle, however, though they do not enable us to connect obesity with the organ last referred to, show some degree of correspondence between that condition, or a tendency to it, and another very important viscus. The size of the liver certainly seems to bear a proportion to the weight of the animal. The livers of the lean beasts first mentioned weighed only 13 or 14 pounds, while in the Scotch beasts they were from 16 to 20. The pancreas weighed about a pound in all equally.

Whether we shall ever arrive at an exact knowledge of what is the form and proportion of internal organs which causes obesity I know not, but whenever we do so, I think it will be by means of observations on the relations which these several viscera bear to one another in the healthy subjects. All that can be deduced from what has gone before is, that their lungs are not probably smaller than those of others, but, from some unexplained cause, are not capable of containing so much air; that the upper ribs are somewhat impeded in their motions, but the diaphragm not at all; that if our race resembles, as it probably does, cattle in the proportion of its organs, the livers of obese persons are likely to be larger than those of others, and their pancreas of the same size.

We come next to the functions of the organs of reproduction. Corpulence has been stated to diminish the fertility of the human species, and instances are quoted among the higher ranks where families with this tendency have become extinct. But this is hardly a fair argument; for it must be remembered that the upper classes are never so prolific as those below them in social position, and that every aristocracy in Europe, unless constantly recruited by new creations, would soon have none to represent it. Several of the cases before us, who are married, are by no means infertile, and some have much exceeded the average of four to each married pair, which the Registrar-general's report assigns as the number calculated to continue the increase of the population at its present rate. Two brothers and a sister, of considerable obesity (Nos. 27, 28 and 29), have 26 children between them, instead of the average number 12. No. 33 has 12 children; No. 35, 11, though his wife, as well as himself, is remarkably corpulent, weighing, he tells me, nearly 17 stone; No. 11 has had 10 miscarriages; No. 15 has seven, No. 18, six, No. 22, five children.

Whatever be the form of body which predisposes to obesity whether, what has been here suggested, or any other more hidden conformation, concerned with more mysterious functions, there is no question about the fact, that it is handed down from parent to offspring in a more marked degree than any other disease. Thus, while 13 per cent. is the full proportion of insane patients whose disease can be traced to the preceding generation, and 24½ per cent. the number of consumptive persons in whom the affection is hereditary, we shall see, by looking at the table of corpulent persons, that their tendency is referable to their ancestors in 20 out of the 38 cases quoted, in 5 more is to be seen in their collateral relations, in 6 only is stated to be absent, and in the rest is doubtful or not known.

This hereditary nature of corpulence, rather I think than any peculiarity of climate, has made it endemic in several countries. It appears to hold more to the race than to the land they live in. Our own nation has been long known for its tendency. Erasmus says, that in his day for one stout person to be seen on the Continent, there were four in England. Among the pure Celts who live in the same climate as we do, it is less frequent. It has been diminished in our Transatlantic brethren, probably from the more general mixture of blood by intermarriage.

In China there is every variety of climate, food and social condition, yet Mr. Finlayson remarks, "*The whole race displays a remarkable tendency to obesity. The nutritious juices of the body are directed towards the surface, distending and overloading the cellular tissues with an inordinate quantity of fat.*" This general tendency of the whole people can only be attributed to the hereditary diathesis, unchecked by intermarriage with others differently constituted. It is an evil which the exclusiveness of that singular people has entailed upon them.

Of the *exciting causes* of obesity in those disposed to it, none appears so common as the occurrence of an acute attack of illness. This was the case in eight of the instances quoted in the table before us, where we find scarlatina (in two persons), "a fever," gonorrhœa, childbirth, erysipelas, "an illness," syphilis, quoted as the causes of the sudden increase of fat. The confinement rendered necessary by the disorder has probably a great share in the obesity consequent on it, but the complete change in the nutrition of the whole body which an acute fever gives rise to, must not be overlooked. A full examination of what we know of this change of nutrition in fever, and its peculiar connection with adipose matter, will more properly come under our consideration when we arrive at the subject of Emaciation. At present it will be enough merely to allude to the loss of fat which accompanies, or even *precedes* the change of temperature in febrile heat, and to remark that when that febrile heat declines, there is a natural disposition to regain fat, and in those patients who have a tendency to obesity, the secretion is apt to accumulate in excess.

Accidental surgical injuries are not an infrequent cause. This happened, as before mentioned, to the boy exhibited by Mr. Pettigrew, at the Royal Institution, whose obesity was attributed to a fractured limb.

The colon and the small intestines were lying exposed, and the only appearance of an omentum was a strip about an inch in width, attached to the stomach. We next examined the intestines, commencing at the rectum, which was filled with ash-colored *feces*, and inflamed. The *cæcum*, though less inflamed than the other intestines, had bright red patches throughout its coats; the colon, jejunum and ileum showed strong evidences of inflammation, being of a dark mahogany color, and the coats of the small intestines much thickened. The mesenteric glands were discolored, but not enlarged. The duodenum was much contracted in size, and, about that portion of it where the pancreatic duct and the ductus choledochus penetrates it, was adherent to the liver and pancreas. The *stomach* presented no signs of disease. The liver was diminished in size, the stomach being uncovered by the left lobe; the right lobe was also smaller, and the portion attached to the pancreas, together with that viscus, were of a cartilaginous character. No *gall-bladder*, or any vestige of one, could be found, after the most careful investigation. Upon opening the cartilaginous portion of the liver, a gall-stone was found imbedded in the ductus choledochus, just at its entrance into the duodenum. It measured in its long circumference two and three quarter inches; in the small circumference two inches, and weighed one hundred and nine grains. It is of a dull-red color, with patches of a white crystalline coating. The uterus was healthy in appearance, though filled with a semi-organized substance. Between the insertions of the round ligament, and the Fallopian tube of each side, was a tumor, on the left side about the size of a large pea, and of an osseous consistence; on the right as large as a hazel-nut, and cartilaginous. They were so situated that the slightest pressure on them would close the orifices of the Fallopian tubes. She had been married twenty-five years, but had not conceived. Could these tumors, by their mechanical effect, be the cause? The ovaria were healthy.

She had suffered for some years with the usual symptoms of indigestion; but had not, at any time, very acute pain in the *right* hypochondriac, or epigastric regions; at least none that could cause a suspicion of the passage of a calculus of the ordinary size.

From the absence of the gall-bladder, no cystic bile could have been secreted; and from the situation of the stone, no bile could pass into the duodenum, thus seriously deranging digestion and nutrition, producing the inflammatory condition of the intestines, resulting in death, and the *cause* of which, no art could remove.

The questions arise, what became of the omentum and gall-bladder?—or was this one of those abnormal formations mentioned by authors, where those organs are absent? If there was originally no gall-bladder, how was the calculus formed? or did its size produce ulceration and rupture of the bladder, and its subsequent absorption? These are interesting questions, but difficult of solution.

Upon mentioning the foregoing case to a medical friend from Philadelphia, he informed me that he recently had a case of calculi in the gall-bladder and ducts, resulting in death in 15 hours, in which there was no pain in the *right* hypochondrium; but intense pain in the *left*, ex-

tending to the epigastrium. Two of the most eminent of the physicians of that city, saw her with him, and were not led by her *symptoms* to suspect her disease, though one of them suggested that such might be the cause. The post-mortem examination disclosed the gall-bladder filled with small calculi, one of which, not larger than a small pea, had closed the passage of the cystic duct. These cases show the obscurity of the diagnosis in biliary calculi, and should lead us to suspect their presence when efficient means are unavailably used to relieve affections of the stomach and bowels, when timely resorted to.—*New Jersey Medical Reporter*.

CASES OF POISONING BY ARSENIC.

STATE OF OHIO *vs.* JAMES SUMMONS.—The defendant was charged with putting arsenic in a tea kettle of hot water, which was used in making tea for the family of defendant's father, with intent to poison and destroy them. It appears that on the evening of the 20th of July last, the family were suddenly taken, while at tea, vomiting and purging, giving rise to the suspicion of poisoning. As soon as possible an analysis of some of the tea and matters vomited was made, which gave the characteristic precipitates of arsenic with ammoniated sulphate of copper and nitrate of silver, which was sufficient to indicate the proper course of treatment in the administration of antidotes. The hydrated peroxide of iron was at once freely given to all that showed symptoms of poisoning—eight in number. They all exhibited violent symptoms of poisoning, and all recovered except two. One of these was a lady, an inmate of the family, about 50 years of age, and the other a child 3 or 4 years old, neither of whom would take the iron freely, but particularly the lady, who seemed to be exceedingly prostrated, and refused to take it freely, on account of her listless and prostrate condition. The balance of the family took it for several days, at intervals, and all recovered.

Our main object in noticing these cases at present is to add to the facts in regard to the antidotal power of the *hydrated peroxide of iron*, the utility of which was incontestably proved in the above six cases. The treatment was witnessed by several of our most respectable physicians.

In a *legal* point of view, it became also important to determine the nature of the poison taken. The tea, vomited matters, the slops, and the contents of the stomach of the lady who died, were examined for this purpose by Dr. Raymond, a very competent and able chemist of this city. It is well known that the law and justice demand that *all* the tests be brought to bear that are known, so as not to rely upon one, two or three tests to establish the facts. For this purpose the above articles were submitted by him separately to the following processes:

Dilute muriatic acid was boiled for half an hour on clear strips of copper foil without any change in the brightness of the copper. Then the suspected fluids were added, immediately the copper was coated over, and presented the appearance of rolled zinc. The boiling was continued for half an hour, or until sufficient incrustation had taken place. The

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The importance of these observations consists in their application to diagnosis. They lead us to be cautious in our examination of the chests of corpulent persons, and bid us not to jump to the conclusion that there is pulmonary disease, simply because there is diminished vital capacity or diminished movement apparent to the eyes.

I was anxious to put in consecutive order all the facts I have to lay before you about the lungs of corpulent persons, and therefore I have postponed to this point what might have been introduced when showing, by reference to the examples afforded in the casts before us, that the actual size of the lungs bears little proportion to the height or weight of the individual. What I wish to say now is, that comparative anatomy quite bears out this opinion. It is seldom that an opportunity occurs of weighing the lungs of a perfectly healthy man, but healthy beasts are always open to observation in our butchers' slaughter-houses; and as the animals are always killed in the same way in London, the internal organs, when sound, appear to the eye always in the same condition as regards the blood, &c., which might affect their weight. I have thought, therefore, it might be interesting to know what relation to the weight of the whole beast several of the viscera bear, and what, also, is their mutual relation in different breeds of cattle of different degrees of fatness. I have therefore obtained at several slaughter-houses the weights taken,

while the carcass was being cut up, of the lungs, liver and pancreas, and the weight of the quarters, of between seventy and eighty cattle. The result is, as I said before, that the lungs bear no relation to the weight of the beast, or to its fattening propensities. Thus, a thin, large-boned Dutch beast, whose four quarters weighed 95 st. 6 lbs., had lungs weighing but 9 lbs. 10 oz. ; but a small Norfolk beast, weighing 57 st. 1 lb., also thin and unfatted, had 11 lbs. 6 oz. of lung ; a Leicester, of 55 st. 7 lbs., had 7 lbs. 8 oz. of lung ; small beasts, with 20 or 30 stone of fat upon them, had lungs similarly proportioned ; 23 "improved Scotch" oxen, the quarters weighing from 100 to 104 stone each, had an average of 9½ lbs. of lung. The lungs of beasts that fatten well do not seem to be, as Prof. Liebig suggests, smaller than the lungs of those that fatten ill.

The same observations on cattle, however, though they do not enable us to connect obesity with the organ last referred to, show some degree of correspondence between that condition, or a tendency to it, and another very important viscus. The size of the liver certainly seems to bear a proportion to the weight of the animal. The livers of the lean beasts first mentioned weighed only 13 or 14 pounds, while in the Scotch beasts they were from 16 to 20. The pancreas weighed about a pound in all equally.

Whether we shall ever arrive at an exact knowledge of what is the form and proportion of internal organs which causes obesity I know not, but whenever we do so, I think it will be by means of observations on the relations which these several viscera bear to one another in the healthy subjects. All that can be deduced from what has gone before is, that their lungs are not probably smaller than those of others, but, from some unexplained cause, are not capable of containing so much air ; that the upper ribs are somewhat impeded in their motions, but the diaphragm not at all ; that if our race resembles, as it probably does, cattle in the proportion of its organs, the livers of obese persons are likely to be larger than those of others, and their pancreas of the same size.

We come next to the functions of the organs of reproduction. Copulience has been stated to diminish the fertility of the human species, and instances are quoted among the higher ranks where families with this tendency have become extinct. But this is hardly a fair argument ; for it must be remembered that the upper classes are never so prolific as those below them in social position, and that every aristocracy in Europe, unless constantly recruited by new creations, would soon have none to represent it. Several of the cases before us, who are married, are by no means infertile, and some have much exceeded the average of four to each married pair, which the Registrar-general's report assigns as the number calculated to continue the increase of the population at its present rate. Two brothers and a sister, of considerable obesity (Nos. 27, 28 and 29), have 26 children between them, instead of the average number 12. No. 33 has 12 children ; No. 35, 11, though his wife, as well as himself, is remarkably corpulent, weighing, he tells me, nearly 17 stone ; No. 11 has had 10 miscarriages ; No. 15 has seven, No. 18, six, No. 22, five children.

Whatever be the form of body which predisposes to obesity whether, what has been here suggested, or any other more hidden conformation, concerned with more mysterious functions, there is no question about the fact, that it is handed down from parent to offspring in a more marked degree than any other disease. Thus, while 13 per cent. is the full proportion of insane patients whose disease can be traced to the preceding generation, and $24\frac{1}{2}$ per cent. the number of consumptive persons in whom the affection is hereditary, we shall see, by looking at the table of corpulent persons, that their tendency is referable to their ancestors in 20 out of the 38 cases quoted, in 5 more is to be seen in their collateral relations, in 6 only is stated to be absent, and in the rest is doubtful or not known.

This hereditary nature of corpulence, rather I think than any peculiarity of climate, has made it endemic in several countries. It appears to hold more to the race than to the land they live in. Our own nation has been long known for its tendency. Erasmus says, that in his day for one stout person to be seen on the Continent, there were four in England. Among the pure Celts who live in the same climate as we do, it is less frequent. It has been diminished in our Transatlantic brethren, probably from the more general mixture of blood by inter-marriage.

In China there is every variety of climate, food and social condition, yet Mr. Finlayson remarks, "*The whole race displays a remarkable tendency to obesity. The nutritious juices of the body are directed towards the surface, distending and overloading the cellular tissues with an inordinate quantity of fat.*" This general tendency of the whole people can only be attributed to the hereditary diathesis, unchecked by inter-marriage with others differently constituted. It is an evil which the exclusiveness of that singular people has entailed upon them.

Of the *exciting causes* of obesity in those disposed to it, none appears so common as the occurrence of an acute attack of illness. This was the case in eight of the instances quoted in the table before us, where we find scarlatina (in two persons), "a fever," gonorrhœa, childbirth, erysipelas, "an illness," syphilis, quoted as the causes of the sudden increase of fat. The confinement rendered necessary by the disorder has probably a great share in the obesity consequent on it, but the complete change in the nutrition of the whole body which an acute fever gives rise to, must not be overlooked. A full examination of what we know of this change of nutrition in fever, and its peculiar connection with adipose matter, will more properly come under our consideration when we arrive at the subject of Emaciation. At present it will be enough merely to allude to the loss of fat which accompanies, or even *precedes* the change of temperature in febrile heat, and to remark that when that febrile heat declines, there is a natural disposition to regain fat, and in those patients who have a tendency to obesity, the secretion is apt to accumulate in excess.

Accidental surgical injuries are not an infrequent cause. This happened, as before mentioned, to the boy exhibited by Mr. Pettigrew, at the Royal Institution, whose obesity was attributed to a fractured limb.

A case was also related to me a few days ago by a non-professional gentleman, who had the misfortune, some years ago, to be thrown out of a tandem in company with a friend. Both were severely hurt, but the worst part of the consequences happened to the latter, who began from that time to be obese, and has never since recovered.

An analogous cause is chronic disease, which makes confinement necessary without injuring the constitution. Dr. Wilson related to me the case of a gentleman laid up with chronic rheumatism, who has become so unwieldy, that he is obliged to have a machine constructed to raise him in his bed.

The occupations which most dispose to obesity are those which join superabundant diet to moderate exercise in the open air; such as, for example, the life led by coachmen. Moderate exercise always disposes to the accumulation of adipose matter, or what is commonly called good condition. The fact is familiar to all whose avocations confine them to a sedentary intellectual life. A few days' shooting, or a pedestrian tour (knapsack on back), though we are knocked up every night, adds many pounds to our weight. Ease and relaxation of mind must of course be taken into account as an accessory cause in this instance. Such is probably the cause of the corpulence which is common among the prostitutes of great towns at about 30 years of age. I think this is more reasonable than to attribute it to syphilis or the taking of mercury, because it is certainly the most robust and healthy looking who become so affected; and because M. Parent Duchatelet informs us that many in Paris, who, he is convinced, never had any venereal complaint, grow equally corpulent with the others.

In prisons, it is observed that those who are confined for long periods on sufficient diet, with the healthy exercise of hard labor, increase in weight, whereas those who are sentenced to one or two months only, generally decrease. This is shown to be pretty constantly the case by a short but accurate series of observations taken by Mr. Pinson, the governor of Norwich Castle, since the middle of September, last year; and of which he has kindly forwarded me a manuscript copy. I am not aware of any records similar to these, where the age, height and weight of the prisoners at different periods are detailed; but trust that the example will be followed at other jails, for with the accurate information concerning the diet of the class of persons observed which we possess, it is calculated to afford much valuable knowledge.

Tranquillity of mind has a well-known power over the accumulation of fat, familiar even to the poets. During the acute stage of mania patients become emaciated, but when that passes off they regain flesh. Dr. Sutherland tells me he is accustomed to draw from this circumstance a prognosis concerning the disease: if the mental affection abates at the same time, he views the fattening as a favorable symptom; but if, on the contrary, it occurs without improvement in the state of the mind, it is unfavorable. Very frequently, he tells me, when the disease is likely to pass into imbecility or fatuity, the patient's face becomes fat and pasty in appearance.

One of the individuals whose cases I have tabulated, expressly attri-

butes his obesity, in letter to me, to "too little to do, and a contented disposition."

Taking a large quantity of liquid of any description is not an unfrequent cause of corpulence. Those who are copious water-drinkers, seem to suffer as much as the intemperate, and there are few obese persons who are not inclined to thirst.

No. 13 (E. L. A.) may recal to our minds the observations of Mr. Morton on sheep, where defective light was found to add so much to the fattening powers of moderate diet. He was employed in the cellars of a brewery, and, though strictly temperate, found his bulk becoming so great as to give him much alarm. He obtained a situation as clerk in the same establishment, and found the employment above ground cause a rapid reduction. He has since become a collecting clerk, and is diminished still more.

It would be expected that want of sunlight would have a similar effect on colliers, but I cannot find that it does so; probably their severe labor, and the activity of their skin, from working naked, and frequent washing, may counteract the influence of darkness.

These, and a variety of similar circumstances, under which obesity is apt to occur, may in fact be brought under the same common expression before laid down, that *fat is formed where the materials are digested in greater quantity than is necessary to supply carbon to the respiration*. But to cite more of these circumstances would be an unnecessary consumption of time, and would render this lecture rather a collection of interesting anecdotes than a scientific deduction.—*Lancet*.

AUTOPSY REVEALING THE ABSENCE OF GALL-BLADDER.

BY D. B. TRIMBLE, M.D., BURLINGTON, N. J.

THE subject of examination was a woman aged 55 years, whom I was called upon to attend on the 6th of January. I found her complaining of pain in the epigastric region, nausea, occasionally vomiting, slightly furred tongue, pyrosis, anorexia, and constipation. All these symptoms had been progressing for several months, though she was still able to attend to her household duties. Firm pressure on the epigastric region gave her pain, but not acute. Her pulse was frequent, though not full or tense. As her disease progressed, she twice, at considerable intervals and for some hours, complained of pain in the shoulder; her appetite became more and more depressed; emaciation increased rapidly, ascites supervened, and death released her on the 24th of June.

From the symptoms, I considered it a case of chronic gastro-enteritis, approaching the stage of ulceration, and the treatment was in accordance with these views. The autopsical examination, however, showed that my diagnosis was partially wrong, but at the same time proved that no medical efforts would have relieved her.

On the evening of the 24th, accompanied by my friend, Dr. Gauntt, I proceeded to the investigation, and on opening the abdomen, found it filled with serous fluid of a reddish color, in quantity about one gallon.

The colon and the small intestines were lying exposed, and the only appearance of an omentum was a strip about an inch in width, attached to the stomach. We next examined the intestines, commencing at the rectum, which was filled with ash-colored feces, and inflamed. The cæcum, though less inflamed than the other intestines, had bright red patches throughout its coats; the colon, jejunum and ileum showed strong evidences of inflammation, being of a dark mahogany color, and the coats of the small intestines much thickened. The mesenteric glands were discolored, but not enlarged. The duodenum was much contracted in size, and, about that portion of it where the pancreatic duct and the ductus choledochus penetrates it, was adherent to the liver and pancreas. The stomach presented no signs of disease. The liver was diminished in size, the stomach being uncovered by the left lobe; the right lobe was also smaller, and the portion attached to the pancreas, together with that viscus, were of a cartilaginous character. No gall-bladder, or any vestige of one, could be found, after the most careful investigation. Upon opening the cartilaginous portion of the liver, a gall-stone was found imbedded in the ductus choledochus, just at its entrance into the duodenum. It measured in its long circumference two and three quarter inches; in the small circumference two inches, and weighed one hundred and nine grains. It is of a dull-red color, with patches of a white crystalline coating. The uterus was healthy in appearance, though filled with a semi-organized substance. Between the insertions of the round ligament, and the Fallopian tube of each side, was a tumor, on the left side about the size of a large pea, and of an osseous consistence; on the right as large as a hazel-nut, and cartilaginous. They were so situated that the slightest pressure on them would close the orifices of the Fallopian tubes. She had been married twenty-five years, but had not conceived. Could these tumors, by their mechanical effect, be the cause? The ovaria were healthy.

She had suffered for some years with the usual symptoms of indigestion; but had not, at any time, very acute pain in the *right* hypochondriac, or epigastric regions; at least none that could cause a suspicion of the passage of a calculus of the ordinary size.

From the absence of the gall-bladder, no cystic bile could have been secreted; and from the situation of the stone, no bile could pass into the duodenum, thus seriously deranging digestion and nutrition, producing the inflammatory condition of the intestines, resulting in death, and the cause of which, no art could remove.

The questions arise, what became of the omentum and gall-bladder?—or was this one of those abnormal formations mentioned by authors, where those organs are absent? If there was originally no gall-bladder, how was the calculus formed? or did its size produce ulceration and rupture of the bladder, and its subsequent absorption? These are interesting questions, but difficult of solution.

Upon mentioning the foregoing case to a medical friend from Philadelphia, he informed me that he recently had a case of calculi in the gall-bladder and ducts, resulting in death in 15 hours, in which there was no pain in the *right* hypochondrium; but intense pain in the *left*, ex-

tending to the epigastrium. Two of the most eminent of the physicians of that city, saw her with him, and were not led by her *symptoms* to suspect her disease, though one of them suggested that such might be the cause. The post-mortem examination disclosed the gall-bladder filled with small calculi, one of which, not larger than a small pea, had closed the passage of the cystic duct. These cases show the obscurity of the diagnosis in biliary calculi, and should lead us to suspect their presence when efficient means are unavailably used to relieve affections of the stomach and bowels, when timely resorted to.—*New Jersey Medical Reporter*.

CASES OF POISONING BY ARSENIC.

STATE OF OHIO *vs.* JAMES SUMMONS.—The defendant was charged with putting arsenic in a tea kettle of hot water, which was used in making tea for the family of defendant's father, with intent to poison and destroy them. It appears that on the evening of the 20th of July last, the family were suddenly taken, while at tea, vomiting and purging, giving rise to the suspicion of poisoning. As soon as possible an analysis of some of the tea and matters vomited was made, which gave the characteristic precipitates of arsenic with ammoniated sulphate of copper and nitrate of silver, which was sufficient to indicate the proper course of treatment in the administration of antidotes. The hydrated peroxide of iron was at once freely given to all that showed symptoms of poisoning—eight in number. They all exhibited violent symptoms of poisoning, and all recovered except two. One of these was a lady, an inmate of the family, about 50 years of age, and the other a child 3 or 4 years old, neither of whom would take the iron freely, but particularly the lady, who seemed to be exceedingly prostrated, and refused to take it freely, on account of her listless and prostrate condition. The balance of the family took it for several days, at intervals, and all recovered.

Our main object in noticing these cases at present is to add to the facts in regard to the antidotal power of the *hydrated peroxide of iron*, the utility of which was incontestably proved in the above six cases. The treatment was witnessed by several of our most respectable physicians.

In a *legal* point of view, it became also important to determine the nature of the poison taken. The tea, vomited matters, the slops, and the contents of the stomach of the lady who died, were examined for this purpose by Dr. Raymond, a very competent and able chemist of this city. It is well known that the law and justice demand that *all* the tests be brought to bear that are known, so as not to rely upon one, two or three tests to establish the facts. For this purpose the above articles were submitted by him separately to the following processes:

Dilute muriatic acid was boiled for half an hour on clear strips of copper foil without any change in the brightness of the copper. Then the suspected fluids were added, immediately the copper was coated over, and presented the appearance of rolled zinc. The boiling was continued for half an hour, or until sufficient incrustation had taken place. The

copper with the deposit was introduced into a sublimating tube of French glass, closed at the lower end, and the heat of a spirit lamp applied until the copper became bright—a steel-colored crust was formed above the flame on the cooler portion of the tube. The lower end of the tube was opened so as to admit air freely, and heat again applied so as to re-sublime the crust. It was then deposited in the form of a white ring. The subliming tube and contents were introduced into a test tube with distilled water and boiled. This solution was tested with sulphate of copper and nitrate of silver, and exposed to the vapor of ammonia, and gave their characteristic re-actions. On this series of processes the doctor rested his opinion of the presence of arsenic.

Marsh's process was also used, and arsenic discovered. It seems almost impossible for anything to be more perfect or convincing than the above experiments, and they may be instanced as a case in which chemistry develops facts in medical jurisprudence that will admit of no cavilling. In this process we see, first, the muriatic acid was tested as being free from arsenic, by forming no precipitate on the copper foil. When the matters were added, metallic arsenic was precipitated on the foil, changing its color. In the next step the metallic arsenic was sublimed to the cooler portion of the tube; then upon the admission of air freely it became oxidized, forming arsenious acid, and was again sublimed; and in this form forming a white crust characteristic of the white oxide, or arsenious acid. Then by applying the tests of nitrate of silver and sulphate of copper with ammonia, we have from the nitrate of silver and ammonia a yellow precipitate, the arsenite of the oxide of silver; and from the sulphate of copper and ammonia a green precipitate, known as Scheele's green.

We may add that two successive juries were unable to agree in reference to the connection of the prisoner with the facts. The case lies over until next term.—*Western (Cincinnati) Lancet.*

RECOMMENDATION OF PATENT MEDICINES.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The disclaimer below is from a highly respectable source, is honorable and conciliatory in its character, and I think its publication in your Journal will do good. Others may be suffering in our estimation in the same way as the writer of the article quoted, either because they have not known of their names being thus used, or, if known, have not troubled themselves to secure corrections. The Puritan Recorder is a religious journal, of leading respectability in New England, and of extensive circulation. It generally presents an intelligent and consistent view of our profession, and has of late published several articles well calculated to lessen the rising asperities between the medical and clerical professions. The same number, however, which publishes the disclaimer, also advertises the said pectoral, with the reverend gentleman's name and the forged recommendation still appended. The editors have not, probably, noticed the incongruity, and will either make the requisite correction,

or remove the mendacious notice altogether. It would be satisfactory also to know whether the names of Professors Silliman and Cleaveland, as well as that of Dr. Osgood, have been used in the advertisement without their consent. The same *cherry pectoral* we see advertised weekly in your Journal.*

Yours, &c. A. C.

E. Abington, July 29, 1850.

"To the Editors of the *Puritan Recorder*.

"I have been interested in some articles in your paper, on the subject of the encouragement which it was asserted that ministers gave to patent medicines, to the prejudice of regularly-educated physicians. That such physicians, who generously give their professional services to clergymen, should feel hurt at their course, I am not surprised, and I was not aware that clergymen were in the habit of recommending patent medicines to any extent. Not feeling myself implicated in any degree, I paid no particular attention to the evil complained of in the articles. But within a few days I was visited by an agent of some one of the rival patent medicine makers, and asked if I gave my name in a recommendation of 'Ayer's Cherry Pectoral.' I answered in the negative. He said my name was on the label, or at least the name of Rev. Dr. Osgood, and in connection with Springfield. On referring to the label, I found it even so; stating that a daughter of mine, who had been sick for a long time with pulmonary difficulties, had been cured by this medicine. The whole is a fabrication; I never gave my name to any recommendation of any patent medicine. I have ever employed regular physicians, and I should never take medicine under serious indisposition, without the recommendation of such a physician. I have not felt it incumbent on me to speak disrespectfully of the practice of those men who undertake to cure all diseases by the smallest imaginary doses of medicine, or hot drops, or bread pills. I am aware that in many instances, the nervous system may be affected, and that the imagination may be so excited as to afford relief to the body, by means the most simple. But I should not think it incumbent on me either to follow the prescriptions of those who undertake to cure such diseases by their nostrums, or to recommend them to my friends, to the detriment of thoroughly-educated physicians. A good woman belonging to my society, once recom-

* With regard to the matter alluded to above by Dr. C., we are glad of the opportunity of saying, that it has always been the desire and intention of the publisher of this Journal to exclude from it all objectionable advertisements. On the passage of the resolutions relating to nostrums, at the last meeting of the American Medical Association, that portion of them having particular reference to this point seemed to include in its censure the advertisement in question. On account, however, of an agreement having been made for its insertion one year, it cannot yet be omitted. This agreement was entered into with the knowledge that the ingredients composing the article had been made known in this Journal and to the profession generally, and that it had been considered by many physicians as not belonging to the common class of quack medicines. The publisher is still desirous of conforming in this matter to the resolutions of the Association, which we believe constitute an important step in the process of medical reform; but readers of the Journal must be aware that it may sometimes be difficult to decide whether the advertisement of an article should be admitted or excluded. Certain compounds, it is well known, are in general use by the profession, and whose advertisement has never been objected to, but which might with strict propriety be classed in the same category with the Cherry Pectoral, so far as the mode of their preparation is concerned. These remarks have no reference to the charge above made of publishing false certificates, with which this Journal has had nothing to do.—ED.

mended to me what she said would certainly cure the rheumatism, with which I was slightly affected, viz.: 'cut a stick from a poplar tree, four inches long, take off the bark, and lay it away in a bureau in a chamber, and not look at it for three weeks.' Now it is very probable that in three weeks the disease might depart; but I had not the requisite confidence in the power of the poplar stick, to induce me to try it. It is said 'conceit will kill, and conceit will cure,' but I shall continue to give my confidence to physicians of the first order. I should not have troubled you with this article, if I had not been told that my name was quoted to support the practice, which it was the object of the writers in your paper to condemn. I never speak disparagingly of physicians, neither do I recommend my own physician above all others. Ministers ought to be careful not give offence 'either to the Jews, or to the Gentiles, or to the Church of God.' They may prefer one course of practice to another, and no man has any cause to be offended. I hope the articles in your paper may assist them to pursue a prudent course. S. Osgood."

"Springfield, July 16, 1850."

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, AUGUST 7, 1850.

EDITORIAL CORRESPONDENCE.

Hospitals of Paris.—Whatever estate belongs to the government, in France, is designated by a flag, always floating. Thus are distinguished all the churches, with the exception of some little boxes where protestant preaching is tolerated, theatres, guard-houses, barrack schools, palaces, halls, galleries of the arts, military stations, some if not all of the medical schools, and the hospitals. One of the first hospitals visited, was that for sick children. The little dependent creatures, from one year old to ten or twelve, perhaps, are most anxiously watched by the physicians and those under them. Their infantile tastes are particularly consulted, by providing one girl with a little doll, another with one a size or two larger, also needles and materials to give them employment in dressing them. Boys have carts in miniature, and some are even indulged with a petit drum! They were all quiet, cleanly in their persons, and unquestionably better provided for than they ever had been before entering the institution. A fine lad of seven or eight was sitting at the head of his bed, having been cut for stone a few days before. He said he knew nothing about the operation; the sister of charity stating, as a reason, that the boy was under the influence of ether. Descriptions of this hospital have been so frequently published in the Journals, that it would be a repetition, only, to attempt to write another.

There are a few unique hospitals, peculiar to this capital, often overlooked by medical visitors, but which are eminently deserving of consideration. One of them is the *Hospice des Incurables Femmes*, whose origin dates in 1634. It is for the reception of aged, infirm women. Each patient has a sleeping room, and an adjoining apartment, or parlor. All their wants are abundantly supplied. The grounds are extensive, and they eat, sleep

and recreate themselves according to their inclinations. Something analogous is much needed in Boston. Funds might be procured in a fortnight for a generous endowment, if presented rightly to the rich men of the city, who never deny the claims of charity.

Next, *L'Hospice des Menages*, where aged married couples are maintained in the same way, the family relation being in no way deranged. Surely Paris has something to be proud of, besides the monuments raised to commemorate the victories of the national arms, in the fact that between six and seven hundred aged men, with their decrepid, poverty-stricken wives, are here made comfortable in the last stages of their earthly pilgrimage, by being clothed, warmed and fed at the public charge, without being degraded in becoming beneficiaries.

Neckar Hospital.—A noble and well-conducted establishment, although wearing the impress of age, as do most of the similar institutions here.

Hopital de la Salpetrière.—This is an Alms-house, containing five thousand inmates, mostly females. Why it is a town, as it were, of itself, embracing extensive buildings and walks, and possessing as many comforts, if not more, than are ever concentrated in similar receptacles for the poor in the States. Country poor-house farms, as they are termed among us, possess all the real advantages of this great station-house for poverty, which mainly consist in having space for ranging within its own walls. Beyond its vastness, there is nothing about it particularly remarkable. Students could not fail to profit exceedingly by attendance on the wards; but advantages equally good could probably be obtained in most of the large Atlantic American cities.

Hopital de la Pitié.—Neatness, order, comfort and cleanliness, characterize this house, or houses, for there is a succession of buildings. A chapel is the last show of the guide. Some of the paintings are to be looked at with respect. In the dead-room were nine bodies, in a novel kind of frame, covered over with india-rubber cloth. They were to be examined.

A further and minute acquaintance with the organization and details of the *Hotel Dieu*, is necessary, before entering upon a description or analysis of its many claims to the first place among European Hospitals. Day by day, notwithstanding the intense heat of the weather, quite unfavorable for traversing long halls, sick wards, flights of stairs and arborescent avenues, progress is making towards viewing all the institutions in Paris, entitled to the consideration of a medical stranger. To go from one country to another, and have the opportunity of witnessing and comparing the schools and hospitals of each, is an exciting pursuit. When the fatigue of travel and the thrill of novelty have passed away, there will be a satisfaction in recalling, in the quiet of home, whatever has been witnessed, and turning to advantage the facts secured on the route.

Most of the hospitals appear to have as many patients as can be accommodated, and consequently they are the places to learn diseases and the best known modes of prescribing for them. On retiring from a promenade through a succession of wards, the question obtrudes itself—do all the sick of Paris go to hospitals for treatment? A bed is no sooner relieved of its occupant, than another is ready to take it; and so it has been for the last three hundred years. Now the public health is very satisfactory, there being no prevalent epidemic, nor any mortality that becomes the subject of conversation. Yet, on entering these great hospitals, we acquire an instinctive notion that death has active agents in the capital of the Grand Republic. On account of such numbers of sick being congregated at so

many points in Paris, students from all countries flock hither. The specialties, too, or places where only one disease is treated, cannot be otherwise than very instructive. With regard to the punctuality of American students in their attendance on the advantages thus presented to them, it is hardly possible for a mere letter writer to decide. One of these students remarked that a female, he believed from the United States, applied for permission to attend the lectures generally. The professor said he had no objection, provided she would put on a coat and pantaloons. From the readiness of Americans residing in Paris, and travellers from America, to employ one of their own countrymen in cases of sickness, when one can be found, it is probable that if an American were established in a central position, and exerted himself to keep foreigners apprised of his residence, he would soon have a profitable business. Several English practitioners are in excellent repute here; — and it is well known that Mr. Ricord, although to all intents and purposes a Frenchman, was born in Baltimore.

Fatal Effects from the Carelessness of an Apothecary.—As mentioned briefly in last week's Journal, an accident of a very serious nature recently occurred in this city. An apothecary, Mr. Wakefield, mistaking the article in the physician's prescription, put up for chloride hydrargyri, the bi-chloride, and thereby, as is reported, caused the death of Mr. James Hall, who took it. We cannot conceive how such an error could have occurred with any kind of carefulness on the part of the apothecary. Bottles may be misplaced, yet that would not afford an excuse; or even the bi-chloride may have been in the wrong bottle, which is still more reprehensible. The fact is, many of our apothecaries are not sufficiently educated, and not careful enough in compounding and dispensing medicines. Too much limit is allowed the apprentice in dealing with articles of such potency. It has often been advocated in the pages of this Journal, that the sale of such potent chemicals should be regulated by law; and further, that the apothecary should receive a medical education, and be duly qualified before entering upon his very responsible office. As the law now exists, any one can set himself up as an apothecary, even if he cannot tell buchu from senna leaves. In a future number we shall have something further to say on this subject.

In the case referred to, upon the verdict rendered by the jury of inquest, who investigated the circumstances attending the death of Mr. Hall, Mr. Coroner Smith entered a complaint in the Police Court against Mr. Wakefield, the apothecary, charging him with manslaughter. Mr. Wakefield was arrested, and brought before Justice Merrill, when, waiving an examination, he was required to furnish bail in \$5000 for his appearance at the ensuing term of the Municipal Court for trial on the charge made against him.

Baltimore College of Dental Surgery.—The eleventh annual announcement of the Baltimore College of Dental Surgery has come to hand. It would appear, from the faculty's circular, that the institution is well appreciated by those who are determined to pursue the only proper method of acquiring a regular medical education, and particularly of that part belonging to dental surgery. The faculty are composed of gentlemen who are not only distinguished for their medical knowledge, but are

among the foremost of dental operators. Under the favorable auspices of the College, the dental student possesses all the appliances to make him proficient in the arts and mysteries of his chosen profession. We notice among the board of examiners, for the present session, our fellow townsman, Dr. Daniel Harwood. The whole number already graduated at this College is eighty-two, six of whom are from Massachusetts.

An address by E. Townsend, D.D.S., delivered before the graduating class of this College, at the tenth annual commencement, contains much good and kind advice, and which was calculated to make an impression upon his audience. The doctor is severe upon those who indulge in the use of *tobacco*, and perhaps his severity may be considered very proper.

A valedictory address also delivered before the graduating class of the College by S. P. Hullihen, M.D., D.D.S., is another most excellent performance. It contains the right kind of sentiment; and if the faithful advice given in it were listened to, much good would result from it. Such parting salutations are expected from the faculty by the student, and when they come from one who seemingly has their interest at heart, they often leave the best of impressions.

Medical Department of the University of Louisiana, New Orleans.—The annual circular of the faculty of medicine in the University of Louisiana has been received. There were graduated at this institution, during the session of 1849-50, thirty-five gentlemen. The whole number of matriculants during the same term, was one hundred and seventy-four. We should judge the institution to be in a highly prosperous condition; and it must possess the confidence of the State government, for the Legislature, at its last session, appropriated *twenty-five thousand dollars* to its interests. This money, in accordance with the vote of the Legislature, is to be expended for preparations, illustrative of the various branches connected with medical science. With such acquisitions to their cabinet, and a full determination on the part of the professors to make the lectures practical and instructive, they cannot fail in making the school attractive to the student in pursuit of medical knowledge.

Surgical Anatomy—By Joseph Maclise, surgeon, with colored plates. Lea & Blanchard, Philadelphia, publishers. Ticknor & Co., Boston. 1850. Part 3 of this work has been received from the publishers. Our opinion regarding its merits was given in a previous number of the Journal, wherein we spoke of its being incomparable, in point of accuracy of design, and in execution. With the present number before us, we cannot see any good reason for changing that opinion. In this number the important subject of hernia, in its various forms, is treated upon in detail, and being illustrated by drawings from nature, is clear and comprehensive. There remains one more number to complete the work; and when finished, it will form a large imperial quarto volume. We hope our readers will avail themselves of our timely advice, to procure a copy of this splendid work before the edition becomes exhausted.

Suffolk District Medical Society—July Meeting.—The Society met on the evening of the 27th, the President in the chair.

Dr. Thorndike, of East Boston, exhibited a portion of the lower jaw, removed by him from a patient on account of malignant disease.

Dr. Ayer mentioned two cases of measles, one accompanied by congestion of the lungs—the other by congestion of the brain, with delirium and convulsions.

Dr. Pitts, of Middlesex Co., related a case of cancer of the breast, which became ulcerated in consequence of the irritating applications of an empiric, and has since for many months exhibited the phenomenon of a flow of milk, the woman not having borne a child for several years.

Dr. H. W. Williams exhibited the instrument of Mons. Ricord for *circumcision* in cases of *phymosis*, and demonstrated the manner of performing the operation. He described the instrument, as consisting of a pair of forceps, similar in construction to the French dressing forceps, but having blades about two inches in length, furnished on their inner surface with *saw-shaped teeth*, and offering a *fenestra* extending nearly the whole length. The portion of prepuce to be excised, is designated by a line drawn with *ink*, commencing at the insertion of the frænum and carried obliquely round to the dorsum of the penis, at a point rather nearer the glans. A large needle is then introduced through the opening in the prepuce, and carried through the mucous membrane and skin at the dorsum, thus fixing them in apposition at that point, where the excision is to be commenced. The fenestrated forceps are then placed upon the *ink line*, and are to be held firmly closed by an assistant, whilst the operator passes from side to side through the two fenestræ a fine needle armed with thread or silk, placing four, five, or six stitches, according to the size of the prepuce. The ends of the several threads are to be left long, as they are afterwards divided into halves, before being tied. The stitches having thus transfixed skin and mucous membrane, the forceps are to be very tightly held by an assistant, or, in the absence of an aid, by a contrivance attached to the handles of the instrument, whilst the portion of prepuce not included within the forceps is excised with a very sharp bistoury. The excision should commence upon the dorsum, and be carried *between* the needle and the blades of the forceps, shaving close along the latter. If the bistoury is dull, there is danger that the mucous membrane will glide before its edge and the incision will be irregular, or the stitches may be cut and correspondence between the edges of the skin and mucous membrane be destroyed. After the excision, the threads which were passed entirely through both sides of the prepuce, are to be divided in the middle and tied at each side. The skin and lining membrane are thus brought exactly together, throughout the entire *contour*, and union by the first intention is almost certain. The stitches may be removed in one or two days, and the recovery of the patient is almost immediate. This manner of operating is an infinite improvement upon the old method of slitting the prepuce upwards, downwards or laterally; as it not only insures a prompt cure, but the patient recovers without the slightest deformity, no inconvenient and ungraceful flaps existing to mortify and annoy him.

Dr. Walter Channing reported a case of *prolapsus* of the bladder in a woman six months pregnant. It had passed through the vagina and appeared externally, separating the labia, and was remarkable for its whiteness of surface and thinness of the sac. By Dr. C., also, a case of *pudendal hernia*, of difficult diagnosis.

Dr. Jeffries remarked respecting cauterization of the uterus, that he was persuaded that the *ointment* of nitrate of silver was as active as a *solution* of the same strength;—it never, like the *solid* stick, causes hemorrhage, whilst the same beneficial results may be expected to follow its employ-

ment. His formula was from one to two drachms of the nitrate to an ounce of lard.

Dr. Buckingham mentioned a case of *peritonitis* following the cauterizing of venereal warts.

Dr. Channing, peritonitis after the operation for occlusion of the womb for retained catamenia,—and another case where it followed the removal of a polypus uteri.

Allusion to the recent most unfortunate mistake of an apothecary, who dispensed with fatal effect 10 grains of the *oxy-muriate* of mercury instead of the same quantity of *sub-muriate*, as was plainly written by the physician, having been made by Dr. J. B. S. Jackson, there followed a discussion respecting the use of Latin names for drugs and the propriety of abolishing this practice. On motion of Dr. John Ware, it was *voted*, To appoint a committee, whose duty it shall be to consider and report upon the expediency of dispensing with the use of Latin in writing medical prescriptions, or instead thereof establishing a common and uniform *nomenclature*. The Committee is composed of the following gentlemen:—Drs. John Ware, D. H. Storer, and G. S. Jones. E. W. B.

Death from Asphyxia.—During the last week there occurred in this city one of those fatal accidents, which so often take place from entering confined passages or vaults. It appears that a man had occasion to enter a cistern in a cellar on one of our wharves, to cleanse it, and not responding to the call of his fellow assistant above, he likewise descended, and so did a third and fourth, when it was discovered that they were all fallen down insensible. The fourth one escaped with his life, but the first three died. Sulphuretted hydrogen or carbonic acid, or the oxide of carbon, are alike destructive of animal life, when inhaled without the mixture of the other gases necessary to respiration. Oxygen, of course, is the antidote which should be immediately resorted to. It is said that "discretion is the better part of valor;" and this is particularly true in cases like the one alluded to. When one person enters a passage or vault, and being called upon, does not immediately answer, it should be taken for granted that SOMETHING IS THE MATTER, and no one should be permitted to follow, unless guarded by a rope and with a lighted lamp.

Deaths in Boston—for the week ending Saturday noon, August 3, 76.—Males, 39—females, 37. Apoplexy, 1—disease of the bowels, 5—disease of the brain, 1—consumption, 12—convulsions, 2—cholera infantum, 4—cholera morbus, 2—canker, 2—child-bed, 2—dysentery, 7—diarrhoea, 1—dropsy, 3—dropsy of brain, 2—fever, 2—typhus fever, 1—scarlet fever, 2—lung fever, 1—hooping cough, 1—disease of heart, 1—intemperance, 2—infantile diseases, 4—disease of the liver, 1—measles, 1—palsy, 1—suffocation by gas, 3—smallpox, 7—suicide, 1—teething, 2—unknown, 1—worms, 1.

Under 5 years, 34—between 5 and 20 years, 8—between 20 and 40 years, 22—between 40 and 60 years, 10—over 60 years, 2. Americans, 35; foreigners and children of foreigners, 41.

There were 134 deaths in the week ending August 4, 1849, of which 50 were by cholera. Deaths in July, 1846, 324; in July, 1847, 367; in July, 1848, 307; in July, 1849, 421; in July, 1850, 271. Mortality from January 1 to July 31, 412 less this year than last.

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Resignation of Professor Drake.—It is with regret we record the resignation of Prof. DRAKE, one among the ablest teachers of our country. During the past session, Dr. DRAKE occupied the chair of Practice in the Medical College of Ohio, which he discharged with singular ability and satisfaction. But, while we regret the separation, it affords us pleasure to know that he left the institution with the kindest feelings towards his late colleagues.

Dr. DRAKE is at this time engaged in the arduous task of collecting materials for the second volume of his great work on the diseases of our country, and is now on an extensive tour of observation for that purpose. The completion of this important work seems to be now the great object of the distinguished author's life; and we join in the common feeling of the profession, that he may be spared to complete the extended series of observations necessary for the second volume.—*Western Lancet.*

Re-vaccination.—March 23, 1850, a report was read to the Academy of Medicine of Belgium, on a work by Dr. Van Berchem on variola and varioloid disease. Among the propositions contained in this report, two in particular were discussed. The first, that variola and varioloid disease are both the same disease, differing only in the suppurative fever that attends variola. The second had reference to re-vaccination. It appeared to be the opinion of the Academy that re-vaccination is indispensable; that the period when it should be practised is not fixed; and that it is desirable that re-vaccination should be performed on a large scale, under the authority of the Government.—*London Medical Gazette.*

Cause of the Diminution of Hydrophobia in London.—The present rarity of hydrophobia is mainly to be attributed to the operation of the Act of Parliament, brought in by Mr. Fox Maule, whereby dogs are not now allowed to draw any vehicle in London. One of the reasons assigned for passing the above-mentioned judicious measure was, that the canine race, when employed in drawing vehicles, particularly in hot dry weather, often get so excited as to become rabid, and then to communicate the disease, not only to other dogs and animals, but also to man. Since the prohibition became law, hydrophobia has almost disappeared from London, or, at least, is a very rare disease; and this happy result is, I think, so much owing to Mr. Maule's exertions, that it would be desirable to make the measure general throughout the whole empire—for the malady prevails elsewhere more frequently than in the metropolis, to which alone (and sixteen miles around) the act now referred to applies.—*Dr. Webster on the Health of London.*

Local Treatment of Cancer of the Breast.—Dr. Grotzner relates the particulars of a case of cancer of the breast, in which inflammation having been excited by chloride of zinc, suppuration was promoted by balsam of Peru, creosote, &c., together with the internal exhibition of iodide of potassium. The tumor was detached, and the surface healed perfectly.—*Casper's Wochenschrift.*

Resignation of Prof. Dudley.—Dr. B. W. Dudley, well known as one of the most distinguished surgeons of our country, and especially celebrated for his success in operating for stone, has resigned the chair of surgery in the Transylvania Medical School, Lexington, Ky.